Virginia Stationary Source Operating Permit (Title V)

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-305 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

<u>Permit Number</u> <u>Effective Date</u> <u>Expiration Date</u>

VA-30872 October 16, 1998 October 16, 2003

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Brick & Tile Corporation of Lawrenceville

Mailing Address: 1244 Brickyard Street

Lawrenceville, VA 23868

Facility Name: Brick & Tile Corporation of Lawrenceville

DEQ Registration

Number: 30872

Facility Location: 16024 Governor Harrison Parkway

Lawrenceville, VA

Permit Issued this 16th day of October, 1998

Dennis H. Treacy, Director

Department of Environmental Quality

Attachments: Table of Contents, 2 pages

Permit Conditions, 14 pages

Brick & Tile Corporation of Lawrenceville Title V Operating Permit Table of Contents

Part	I Fa	cility Information	1
Part	II Er	missions Unit Specific Requirements	2
Α.	Insig	nificant Emission Unit Inventory List	2
В.	Sign	ificant Emissions Unit Inventory List	2
	1.	Process Units	2
	2.	Pollution Control Equipment	3
C.	Emis	ssion Unit Limitations	3
D.	Emis	ssion Unit Specific Permit Terms	4
	1.	Grinding System	
		Limitations	
	2.	NSPS Subpart OOO - Standards of Performance for Nonmetallic Mineral Processin	
		Plants	_
		Limitations	
	3.	Texturing and coating equipment (3-4)	
		Limitations	
	4.	Tunnel kiln for firing brick (3-8)	
		Limitations	
		Recordkeeping	
Part	III Fac	ility-wide and General Requirements	7
Α.	Facil	lity-Wide Conditions and Permit Terms	7
	1.	Other standards for visible emissions	
	2.	Fugitive Dust Emission Standards	
	3.	Periodic Monitoring	
	4.	Startup, Shutdown and Malfunction	
В.	Gene	eral Permit Conditions	8
	1.	Recordkeeping and reporting	
	2.	Failure/Malfunction Reporting	
	3.	Permit Deviation Reporting	
	4.	Severability	
	5.	Duty to Comply	
	6.	Need to Halt or Reduce Activity not a Defense	
	7.	Permit Action for Cause	
	8.	Property Rights	
	9.	Duty to Submit Information	
		•	

Operating Permit VA-30872 Table of Contents - Page 2

	10.	Duty to Supplement or Correct Application	1 1
	11.	Duty to Pay Permit Fees	11
	12.	Changes to Permits for Emissions Trading	11
	13.	Inspection and entry requirements	11
	14.	Annual Compliance Certification	12
	15.	Reopening For Cause	12
	16.	Permit Availability	13
	17.	Transfer of Permits	13
	18.	Permit Expiration	13
	19.	Malfunction as an Affirmative Defense	13
	20.	Permit Revocation or Termination for Cause	14
с.	Perm	nit Shield	14

Part I -- Facility Information

Permittee	Facility
Brick & Tile Corporation of Lawrenceville	Brick & Tile Corporation of Lawrenceville
1244 Brickyard Street	16024 Governor Harrison Parkway
Lawrenceville, VA 23868	Lawrenceville, VA 23868
Responsible Official	Contact person
J. Reid Wren	Leon Williams
President	Vice-President of Production
804-848-3151	804-848-3151

AIRS Identification Number: 51-025-0027

Facility Description: 3251 - The facility is a manufacturer of face brick, pavers, and various brick shapes.

Part II -- Emissions Unit Specific Requirements

A. Insignificant Emission Unit Inventory List

Table II.A.1

Emission	Emission Unit	Citation	Pollutant Emitted (5-80-720 B.)	Rated Capacity
Unit No.	Description	(9 VAC_)		(5-80-720 C.)
3-80	Harrop Industries natural gas fired tunnel dryer (Waste heat from the kiln provides a majority of the heat used in the dryer)	5-80-720 C.2.a	NA	9 MMBtu/hr

B. Significant Emissions Unit Inventory List

1. Process Units

Table II.B.1

Emission Unit No.	Stack No.	Emission Unit Description	Manufacturer and Date of Construction	Size/Rated Capacity
3-1	Enclosed in building	Crusher	McLanahan 303024 (1990)	100 tons/hr
3-2	Enclosed in building with composed of an hammermill, screens, and conveyors		J. C. Steele No. 36-24 Double Rotors (1991)	90 tons/hr
3-4	3-40-A	Texturing and coating. (Primary and secondary production lines)	FMC Corporation (1992)	1,240 lb/hr each
3-8	3-8-A and 3-8 B	Tunnel kiln for firing brick	Harrop Industries (April 1, 1992)	14.8 tons/hr

2. Pollution Control Equipment

Table II.B.2

Stack No./ Emission Unit No.	Control Equipment Description	Manufacturer and Date of Construction	Size/Rated Capacity	Pollutant
3-41/3-41-A-1	Fabric filter for grinding plant	Mikro-Pulsaire Type 400S1 - 220 TRH (1991)	5.9:1 Air to Cloth Ratio	Particulate
3-40/3-40-A-1	Fabric filter for texturing and coating equipment	Donaldson Day 276 RF10 (1992)	5.0:1 Air to Cloth Ratio	Particulate

C. Emission Unit Limitations

Table II.C.1

Unit	Condition/ Reference No.	PM10		NOx		SO_2		СО		VOC	
ID		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
3-2	July 15, 1998 permit, Condition 9	3.1	1.7								
3-8	July 15, 1998 permit, Condition 10	13	56.6	8.2	35.8	10	43.6	17.9	78.0	0.4	1.6

Table II.C.2

Unit ID	Condition No.	Total HAPS		Hydrogen Fluoride		Hydrogen Chloride	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
3-8	July 15, 1998 permit, Condition 10	8.6	37.8	6.1	26.7	2.5	11.1

D. Emission Unit Specific Permit Terms

1. Grinding System (3-2)

Table II.D.1

Regulated Pollutant	Limitation/Standard		Applicable Requirement	Reference Method
	lb/hr	tons/yr		40 CFR 60 Appendix A
PM	0.05 gr/dscf	24.7	Permit Condition 9 of NSR permit issued July 15, 1998	Method 5
PM10	3.1	1.7	Permit Condition 9 of NSR permit issued July 15, 1998	Method 201

Limitations

Particulate emissions from the grinding plant shall be controlled by building enclosure with fabric filter duct collection system. The fabric filter shall be provided with adequate access for inspection.

(9 VAC 5-170-30, Condition 3 NSR permit issued July 15, 1998)

2. NSPS Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants

The requirements of 40 CFR 60 Subpart OOO as described in conditions IID.2 through II D.4.(c) below apply to the following equipment:

3-1 Crusher and 3-2 Grinding plant hammermill, screens, and conveyors.

Table <u>II.D. 3. 1</u>

Regulated Pollutant	Limitation/Standard		Applicable Requirement	Reference Method		
	lb/hr	tons/yr		40 CFR 60 Appendix A		
Particulate matter	0.05 gr/dscf		40 CFR 60.672 (a) (1)	Method 5		

Limitations

Fugitive emissions from the receipt of raw materials, primary crushing, and raw material storage shall be controlled by respective building enclosures. Fugitive emissions from transferring raw materials between buildings shall be controlled by covered conveyors. (9 VAC 5-170-30, Condition 5 NSR permit issued July 15, 1998)

3. Texturing and coating equipment (3-4)

Limitations

(a) Particulate emissions from the texturing and coating equipment shall be controlled by a Donaldson Day 276 RF10 baghouse or equivalent. The Donaldson Day 276 RF10 baghouse shall be provided with adequate access for inspection. The baghouse shall be equipped with a device to continuously measure the differential pressure drop through the baghouse. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. (9 VAC 5-170-30, Condition 4 NSR permit issued July 15, 1998)

4. Tunnel kiln for firing brick (3-8)

Table II.D. 2

Regulated Pollutant	Limitation/Standard		Applicable Requirement	Reference Method	
	lb/hr	tons/yr		40 CFR 60 Appendix A	
PM	14.3	62.4	Permit Condition 10 of NSR permit issued July 15, 1998	Methods 5 & 202	
PM10	13.0	56.6	Permit Condition 10 of NSR permit issued July 15, 1998	Method 201	
NOx	8.2	35.8	Permit Condition 10 of NSR permit issued July 15, 1998	Method 7	
SO_2	10.0	43.6	Permit Condition 10 of NSR permit issued July 15, 1998	Method 6	
СО	17.9	78	Permit Condition 10 of NSR permit issued July 15, 1998	Method 10	
VOC	0.4	1.6	Permit Condition 10 of NSR permit issued July 15, 1998	Method 25	
HF	6.1	26.7	Permit Condition 10 of NSR permit issued July 15, 1998	Method 26	

HCl	2.5	11.1	Permit Condition 10 of NSR	
			permit issued July 15, 1998	Method 26

Limitations

- (a) The annual production of brick shall not exceed 130,000 tons, calculated monthly as the sum of each consecutive 12 month period.
 (9 VAC 5-170-30, Condition 8 NSR permit issued July 15, 1998)
- (b) The approved fuels for the tunnel kiln are natural gas and propane. A change in the fuels may require a permit to modify and operate.(9 VAC 5-170-30, Condition 7 NSR permit issued July 15, 1998)

Recordkeeping

(c) The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Lynchburg Satellite Office. These records shall include, but are not limited to the annual brick production (in tons), calculated monthly as the sum of each consecutive 12 month period. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50)

Part III Facility-wide and General Requirements

A. Facility-Wide Conditions and Permit Terms

1. Other standards for visible emissions

Unless otherwise specified in this part, no owner or other person shall cause or permit to be discharged into the atmosphere from any affected facility any visible emissions which exhibit greater than 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section. This standard is applicable to the following emission units: grinding plant fabric filter exhaust, tunnel kiln exhaust stack, and the Donaldson Day 276 RF10 fabric filter.

(9 VAC 5-50-260, Condition 11 NSR permit issued July 15, 1998)

2. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

- (a) Fugitive dust emissions from the haul roads and yard area at the brick manufacturing facility shall be controlled by wet suppression or other reasonable methods as to prevent particulate matter from becoming airborne. Trucks hauling material to the plant area via public roads/highways shall be wetted or covered to prevent spilling or tracking of dirt on such public roads/highways. Any dirt spilled or tracked onto public roads/highways shall be promptly removed to prevent particulate matter from becoming airborne or creating a traffic hazard. (Condition 6 NSR permit issued July 15, 1998)
- (b) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;
- (c) Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations;
- (d) Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion; and

(9 VAC 5-50-90)

3. Periodic Monitoring

Visual emission checks from each fabric filter exhaust stack and the kiln exhaust stack shall be conducted daily. Records shall be maintained, on site, stating the date and time of each visible emissions check and whether visible emissions were observed. If visible emissions are observed, the record shall include the cause of the emissions and the corrective action taken. Visible emissions checks are not required during start-ups, shut-downs, and malfunctions. (9 VAC 5-50-20)

4. Startup, Shutdown and Malfunction

At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20)

B. General Permit Conditions

1. Recordkeeping and reporting

- (a) All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - (i) The date, place as defined in the permit, and time of sampling or measurements.
 - (ii) The date(s) analyses were performed.
 - (iii) The company or entity that performed the analyses.
 - (iv) The analytical techniques or methods used.
 - (v) The results of such analyses.
 - (vi) The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

- (b) Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9 VAC 5-80-110 F)
- (c) All reports submitted as a result of monitoring contained in any applicable requirement must be submitted at a frequency of no less than every six months. All deviations from permit requirements must be clearly identified in any report required by any condition of this permit. For purposes of this permit a "deviation" means any condition determined by observation, data from any monitoring protocol or any other monitoring which is required by the permit that can be used to determine compliance. Deviations include exceedances documented by continuous emission monitoring or excursions from control performance indicators documented through periodic or compliance assurance monitoring. All monitoring reports submitted as required by this permit must be certified by a responsible official consistent with 9 VAC 5-80-80 G.

(9 VAC 5-80-110 F)

2. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Lynchburg Satellite Office within four (4) daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shut down. (9 VAC 5-20-180)

3. Permit Deviation Reporting

The permittee shall report by the next business day any deviations from permit requirements or any excess emissions, the probable cause of such deviations, and any corrective actions or preventive measures taken.

(9 VAC 5-80-110 F.2)

4. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9 VAC 5-80-110 G.1)

5. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (9 VAC 5-80-110 G.2)

6. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

7. Permit Action for Cause

This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(9 VAC 5-80-110 G.4)

8. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

9. Duty to Submit Information

- (a) The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- (b) Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
 (9 VAC 5-80-110 K.1)

10. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

11. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355 (Rule 8-6 of the Regulations). (9 VAC 5-80-110 H)

12. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

13. Inspection and entry requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- (a) Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- (b) Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- (d) Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-80-110 K.2)

14. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ within 60 days of the end of each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to § 114(a)(3) and § 504(b) of the Clean Air Act. This certification shall be signed by a responsible official and shall include:

- (a) A description of the means for assessing or monitoring the compliance of the source with its emissions limitations, standards, and work practices.
- (b) The identification of each term or condition of the permit that is the basis of the certification.
- (c) The compliance status.
- (d) Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- (e) Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- (f) Such other facts as the permit may require to determine the compliance status of the source.

(9 VAC 5-80-110 K.5)

15. Reopening For Cause

(a) The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- (b) The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- (c) The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (d) The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

16. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

17. Transfer of Permits

- (a) No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- (b) In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

 (9 VAC 5-80-160)
- (c) In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

 (9 VAC 5-80-160)

18. Permit Expiration

Permit expiration terminates the source's right to operate unless a timely (at least six months, but no earlier than 18 months prior to the date of permit expiration) and complete renewal application has been submitted consistent with 9 VAC 5-80-80.

(9 VAC 5-80-170 B)

19. Malfunction as an Affirmative Defense

A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

- (a) A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
- (b) The permitted facility was at the time being properly operated.
- (c) During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
- (d) For malfunctions that occurred for one hour or more, the permittee submitted to the board by the deadlines described in **Condition B 2 Failure/Malfunction Reporting** above, a notice and written statement containing a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notice fulfills the requirement of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements.

In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250)

20. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of this article. The board may suspend, under such conditions and for such period of time as the board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260)

C. Permit Shield

Compliance with the provisions of this permit shall be deemed compliance with all applicable

Operating Permit VA-30872 Brick & Tile Corporation of Lawrenceville Page 15 of 14

requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit. Nothing in this permit shield shall alter the provisions of § 303 of the Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the (i) administrator pursuant to § 114 of the Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law. You are advised that the conditions of the Department's permit dated July 15, 1998 are still valid.

(9 VAC 5-80-140)